

ABSTRACT OF THE DISCLOSURE

The invention is an apparatus and method for managing large numbers of objects having the same property. In various aspects the invention includes an apparatus for use in managing objects, an apparatus for use in managing slots in a page or swap file, and a method for managing a plurality of clustered objects in a container. In still other aspects, the invention includes a computer-readable, program storage medium encoded with instructions that, when performed by a computer, perform such a method and a computer programmed to perform such a method. In one particular embodiment, the invention employs: an allocation bitmap to indicate the state (*i.e.*, in use or free) of various slots in a swap file, a directory bitmap indicating the state of clusters of the slots so that the operating system can quickly locate and allocate slots in the swap file (or files) during a swap, Data structures containing usage counters that indicate how many groups of certain sizes of clusters of free slots can be found in the file, and Lists linking structures for files with compatible usage characteristics.